

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: PORTER *ET AL.*

APPLICATION NO.: 09/876,942

FILED: JUNE 8, 2001

FOR: **METADATA QUALITY IMPROVEMENT**

EXAMINER: W. BASHORE

ART UNIT: 2176

CONF. No: 9076

**Reply Brief**

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Commissioner for Patents  
P.O. Box 1450  
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**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41**

Sir:

This reply brief is responsive to the Supplemental Examiner's Answer mailed on January 22, 2008, and is in furtherance of the Appeal Brief filed on May 15, 2006, the Reply Brief filed on October 6, 2006, the Revised Appeal Brief filed on May 2, 2007, and the Reply Brief filed on October 18, 2007.

I. STATUS OF CLAIMS

Claims 1-21 have been presented; claims 4 and 15-21<sup>1</sup> have been canceled; claims 1-3 and 5-14 are presently pending and stand finally rejected.

The Examiner rejected claims 13-14 under 35 U.S.C. § 101.<sup>2</sup>

The Examiner rejected claims 1, 2, and 5-14 under 35 U.S.C. § 103(a) over a combination of U.S. Patent No. 6,225,995 to Jacobs et al. ("Jacobs"), U.S. Patent No. 6,389,467 to Eyal ("Eyal"), and U.S. Patent No. 6,418,411 to Call ("Call").

The Examiner rejected claim 3 under 35 U.S.C. § 103(a) over a combination of Jacobs, Eyal, Call, and U.S. Patent No. 6,584,468 to Gabriel et al. ("Gabriel").

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Is the rejection of claims 1, 2, and 5-14 under 35 U.S.C. § 103(a) over a combination of Jacobs, Eyal, and Call proper?

Is the rejection of claim 3 under 35 U.S.C. § 103(a) over a combination of Jacobs, Eyal, Call, and Gabriel proper?

III. ARGUMENTS IN REPLY TO EXAMINER'S ANSWER

A. Reply to Examiner's Answer Regarding Claims 1, 2, and 5-14

On page 12 of the Examiner's Answer, the Examiner states the following:

Jacobs teaches *adding said associated metadata to said original metadata in said database*. The Examiner characterizes the claimed invention as modifying metadata this is already stored in the database. For example, Jacobs discloses a method for incorporating state information into a URL where the transaction manager sends a commit request to database server and for causing to cause [sic] changes in response to various browser requests to be committed in the database (col 27, line 65 – col 28, line 3), using the previously stored metadata (col

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<sup>1</sup> On October 18, 2007, Appellants filed an amendment pursuant to 37 C.F.R. § 41.33 canceling claims 15, 16, and 18-21. According to the Supplemental Examiner's Answer, this amendment has been entered. (Supplemental Examiner's Answer, January 22, 2008, pp. 1-2.)

<sup>2</sup> On February 11, 2008, Appellants filed an amendment pursuant to 37 C.F.R. § 41.33 amending claims 13-14 to recite a "computer readable storage medium." (Emphasis added.)

28, lines 26-29). Since the database already contains metadata, the new data that causes change in the database is interpreted as adding onto the already existing data in the database.

Appellants respectfully disagree. Contrary to the Examiner's position, Jacobs does not teach or suggest "adding said associated metadata [that is associated with said plurality of fields of said URI] to said original metadata in said database." Jacobs describes metadata in two contexts: cartridge configuration information and transaction information. (Jacobs, 9:17-57; 19:1-64.) Jacobs' describes a configuration manager that stores the configuration information during the registration of cartridges. (*Id.*, 9:17-57; Figure 6.) This metadata may include the cartridge name, the location of the code that implements the cartridge, etc. Jacobs contains no indication of adding associated metadata, or anything similar, to the stored configuration information (original metadata) in a database.

Transaction information (metadata) for a particular type of transaction includes a cartridge name that identifies a particular cartridge (i.e., software module) that is used to perform the requested transaction. (*Id.*, 19:35-65.) The metadata may also include, for example, a resource-list that identifies the resources (e.g., databases) that are affected by the performance of the requested transaction. (*Id.*) According to Jacobs, for each type of transaction, the transaction information is stored in the cartridge execution engine of the cartridge associated with the transaction type. (*Id.*, 14:48-15:12; 22:16-65; 28:26-29.) When a browser request is received, Jacobs identifies the cartridge associated with the browser request by mapping the cartridge name (included in the browser request) to a type of transaction. (*Id.*, 10:1-10; 19:47-51; 21:42-56; 23:67-24:3.) Jacobs further uses the stored metadata associated with the requested transaction to, for example, open connections with the databases identified in the resource-list of the transaction information. (*Id.*, 21:57-65.) Jacobs contains no indication of adding associated metadata to the transaction information of the cartridge execution engine. Indeed, Jacobs describes nothing similar to appellants' approach of adding associated metadata [that is associated with said plurality of fields of said URI] to the original metadata in a database.

Furthermore, Appellants are perplexed as to how the Examiner arrives at the conclusion that "[s]ince the database already contains metadata, the new data that causes change in the database is interpreted as adding onto the already existing data in the database." Jacobs clearly explains that the commit request that is sent to the database

servers "cause[s] all changes made in response to the various browser requests that belonged to the multiple-request transaction to be committed as an atomic unit of work." (*Id.*, 27:65-28:3.) The changes to the database result from committing a multiple-request database operation. Jacobs contains no indication that the changes to the database that result from committing the multiple-request database operation as an atomic unit of work involve adding to the stored metadata (i.e., the configuration information or transaction information). Simply put, a change in the database resulting from a database operation as disclosed by Jacobs does not teach or suggest adding said associated metadata to said original metadata in said database, as recited.

On page 11 of the Examiner's Answer, the Examiner states the following:

The Examiner interprets Jacobs' URI portions transaction and cartridge as equivalent to the claimed metadata fields. The Examiner interprets Jacobs' disclosure of the revision of the browser message as equivalent to the claimed metadata that is added to the associated original metadata because the dispatcher revises the browser upon locating more information that is that is associated with the cartridge and adds data if needed.

Appellants respectfully disagree. The Examiner's position is illogical: using the stored metadata to generate a revised browser message is not the same as adding associated metadata to original metadata in a database, as recited. Jacobs clearly indicates that the revised browser request simply repackages information received in the original browser message. (Jacobs, 9:5-6; 23:28-53.) As discussed above, Jacobs contains no indication of adding metadata that is contained in a browser request to any stored metadata. This is consistent with Jacobs' stated purpose of having the server remaining stateless by not persistently maintaining the state information which is unknowingly maintained by the clients making the requests. (*Id.*, 32:44-55.)

On pages 10-11 of the Examiner's Answer, the Examiner also states the following:

Jacobs teaches the claim limitation of *analyzing each field of said plurality of fields of said URI associated with a file; identifying metadata that is associated with said each analyzed field; and adding said associated metadata to original metadata in said database*. For example, Jacobs discloses a URI portion that includes transaction state information and cartridge engine information, which is used to identify the state of multiple-request transactions, the metadata associated with the browser request is forwarded by the dispatcher that forwards the URI information, upon receiving the browser request, the virtual path manager to locate a

pointer to a cartridge associated with the browser request and then send a revised browser message to the cartridge instance (col 21, lines 40 – col 22, line 15). Additionally, Jacobs discloses identifying previously stored metadata for a transaction associated with the revised browser message associated with a commit transaction URI (col 26, lines 44-48).

Appellants respectfully disagree. Although Jacobs identifies the cartridge associated with the browser request by mapping the cartridge name (included in the browser request) to a type of transaction (Jacobs, 10:1-10; 19:47-51; 21:42-56; 23:67-24:3.), Jacobs does not teach or suggest "analyzing each field of said plurality of fields of said URI...to determine if an association exists between said each field and predetermined sets of metadata" as recited. Rather, Jacobs performs a simple lookup using the cartridge name to identify the requested transaction type and associated transaction information.

On page 13 of the Examiner's Answer, the Examiner states the following:

Specifically, Eyal teaches adding the URL (and metadata) of the selected medial [sic] clip to store, where the user can change the order of the play-list stored on the network server and accessed using the medial [sic] location and playback module (col 31, line 65 – col [3]2, line 25). The examiner interpret [sic] reordering of the play-list as equivalent to reorganizing the fields because reordering of data organized data in a different manner and Eyal teaches doing this reordering process for URL (and related metadata).

Appellants respectfully disagree. Claims 11 and 12 recite "reorganizing said plurality of fields of said URI associated with said streaming media file." Eyal clearly explains that a play-list contains the verified media links, which are verified URLs. (Eyal, 12:28-29, 64-67.) Accordingly, changing the order of a play-list (Eyal, 32:12-13) merely amounts to changing the order of the URLs contained in the play-list. Therefore, contrary to the Examiner's position, changing the ordering of multiple URLs cannot be interpreted as being equivalent to reorganizing the fields of a single URI (URL), as recited.

On pages 13-14 of the Examiner's Answer, the Examiner states the following:

The Examiner disagrees because the references do not teach away from the claimed invention. The claims are silent about incorporating database tables. The Examiner characterizes the claimed invention as modification of metadata that is already stored in the database. Accordingly, the combination of references, Jacobs, Eyal and Call teach this characterization. Specifically, Jacob's discloses identifying previously stored metadata for a transaction associated with the revised browser message associated with a commit transaction URI (Jacobs, col 26, lines

44-48) using previously stored metadata. Eyal discloses a database for storing metadata associated with streaming media links (Eyal, col 6, lines 4-10) and Call teaches using universal product codes with a URL table allowing a web search engine that can perform web crawler indexing of the websites specified by the listed IP address (Examiner interprets IP address as equivalent to URI based on the appellant's specification, paragraph 34), thereby generating an index to items in the table. All three references are combinable because they teach a database accessible via network (ie., internet) for providing information through the use of accessing data using a locator or identification.

Appellants respectfully disagree. First, the claimed invention cannot be characterized as merely a modification of metadata that is already stored in the database. According to M.P.E.P. § 2141.02, the question under 35 U.S.C. § 103 in determining the differences between the prior art and the claims is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). Moreover, distilling an invention down to the "gist" or "thrust" of an invention disregards the requirement of analyzing the subject matter "as a whole." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Appellants' claimed invention is directed to techniques for enhancing the quality of metadata that is associated with streaming media files. For example, according to one technique, when a search system finds a streaming media file, the search system enhances the metadata associated with the streaming media which is stored in a database by adding to the database the additional metadata derived from the contents of the fields in the Uniform Resource Indicator (URI) of the streaming media file. Accordingly, Appellants' claimed invention amounts to much more than merely a modification of metadata that is already stored in the database. Second, Jacobs specifically states that the server remains stateless by not persistently maintaining the state information retrieved from the URI. (Jacobs, 32:54-55.) Therefore, contrary to the Examiner's position, Jacobs expressly teaches away from combining with references such as Call that teach storing state information in a database.

C. Reply to Examiner's Answer Regarding Claim 3

On page 14 of the Examiner's Answer, the Examiner states the following:

Jacobs in view of Eyal and Call does not teach, but Gabriel teaches reorganizing said plurality of fields in reverse order. For example, Gabriel discloses a ranking and selection process that could be reversed (col. 6, lines 25-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jacobs in view of Eyal and Call to include the reverse ranking process as taught by Gabriel, providing the benefit of indexing network information with searches for files of information relevant to people and resources using weighted links (Gabriel, Abstract section).

Appellants respectfully disagree. Claim 3 recites reorganizing a plurality of fields of a URI in reverse order. In contrast, Gabriel's ranking and selection process is a ranking and selection of links to files. (Gabriel, Abstract, 6:10-27.) None of the links described by Gabriel has its fields reorganized in reverse order, as recited. Therefore, even assuming for the sake of argument that there is a suggestion to combine Jacobs, Eyal, Call, and Gabriel, the combination of these references still would not teach or suggest reorganizing the plurality of fields of a URI in reverse order, as recited.


### III. CONCLUSION

For at least these reasons, along with the reasons presented in Appellants' Appeal Brief, each of claims 1-3 and 5-14 has been improperly rejected. Accordingly, Appellants seek the reversal of the rejection of these claims.

The Commissioner is hereby authorized to charge any shortages or credit any overpayment associated with this filing to our Deposit Account No. 50-0665, under Order

No. 283108005US from which the undersigned is authorized to draw.

Respectfully submitted,  
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Docket No.: 283108005US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Porter et al.

Application No.: 09/876,942

Confirmation No.: 9076

Filed: June 8, 2001

Art Unit: 2176

For: METADATA QUALITY IMPROVEMENT

Examiner: W. L. Bashore

**AMENDMENT PURSUANT TO 37 CFR 41.33**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INTRODUCTORY COMMENTS**

Pursuant to 37 CFR 41.33, applicants amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 6 of this paper.

**AMENDMENTS TO THE CLAIMS**

1. (Previously Presented) A method in a computing system for improving a quality of original metadata associated with a streaming media file having a uniform resource indicator (URI) on a communications network, said URI comprising a plurality of fields, said method comprising the steps of:

maintaining in a database original metadata associated with said streaming media file;

analyzing each field of said plurality of fields of said URI associated with said streaming media file to determine if an association exists between said each field and predetermined sets of metadata, said predetermined sets of metadata comprising metadata;

identifying metadata that is associated with said each analyzed field; and

adding said associated metadata to said original metadata in said database.

2. (Previously Presented) The method in accordance with claim 1, further comprising the step of reorganizing said plurality of fields of said URI to provide a reorganized plurality of fields, wherein said step of analyzing each field comprises analyzing each field of said reorganized plurality of fields.

3. (Previously Presented) The method in accordance with claim 2, wherein said step of reorganizing said plurality of fields comprises reorganizing said plurality of fields in reverse order.

4. (Canceled)

5. (Previously Presented) The method in accordance with claim 1, wherein:  
said step of analyzing each field comprises analyzing each field in contiguous field order until no associated metadata is identified for a field; and  
said step of adding said associated metadata comprises adding metadata associated with fields for which associated metadata has been identified.
6. (Previously Presented) The method in accordance with claim 5, further comprising the step of adding a contents of said field for which no associated metadata was identified to said original metadata in said database.
7. (Previously Presented) The method in accordance with claim 6, further comprising the steps of:  
replacing each connecting character in said contents with a space for providing a plurality of terms;  
adding said plurality of terms to said original metadata in said database.
8. (Previously Presented) The method in accordance with claim 1, wherein said metadata comprise elements related to at least one of content of the streaming media file, intellectual property rights associated with the streaming media file, and instantiation of the streaming media file.
9. (Previously Presented) The method in accordance with claim 1, wherein said streaming media file comprises multimedia.
10. (Previously Presented) The method in accordance with claim 1, wherein said communications network is a computer network.
11. (Previously Presented) A computer system for improving a quality of original metadata associated with a streaming media file having a uniform resource indicator (URI),

said URI comprising a plurality of fields, said computer system comprising at least one computer, each of said at least one computer being communicatively coupled to all of said at least one computer, wherein each of said at least one computer includes at least one program stored on a computer-readable medium therein for allowing communication between each and every of said at least one computer, each of said at least one program operating in conjunction with one another to cause said at least one computer to perform the steps of:

- reorganizing said plurality of fields of said URI associated with said streaming media file;
- analyzing each field of said reorganized plurality of fields of said URI to determine if an association exists between said each field and predetermined sets of metadata, said predetermined sets of metadata comprising metadata;
- identifying metadata associated with said each analyzed field; and
- adding said associated metadata to said original metadata in a database.

12. (Previously Presented) The computer system in accordance with claim 11, wherein each of said at least one program operating in conjunction with one another causes said at least one computer to perform the additional steps of:

- adding a contents of said field for which no associated metadata was identified to said original metadata in said database;
- replacing each connecting character in said contents with a space for providing a plurality of terms; and
- adding said plurality of terms to said original metadata in said database.

13. (Currently Amended) A computer-readable storage medium having embodied thereon a program for causing a processor to improve a quality of original metadata associated with a streaming media file having a uniform resource indicator (URI), said URI comprising a plurality of fields, said computer-readable storage medium comprising:

- means for causing said processor to reorganize said plurality of fields of said URI associated with said streaming media file;
- means for causing said processor to analyze each field of said reorganized plurality of fields of said URI to determine if an association exists between said each field and predetermined sets of metadata, said predetermined sets of metadata comprising metadata;
- means for causing said processor to identify metadata associated with said each analyzed field; and
- means for causing said processor to add said associated metadata to said original metadata in a database.

14. (Currently Amended) The computer-readable storage medium in accordance with claim 13, further comprising:

- means for causing said processor to add a contents of said field for which no associated metadata was identified to said original metadata in said database;
- means for causing said processor to replace each connecting character in said contents with a space for providing a plurality of terms; and
- means for causing said processor to add said plurality of terms to said original metadata in said database.

15-21. (Canceled)

**REMARKS**

Claims 1-3 and 5-14 are pending. Claims 13-14 are amended.

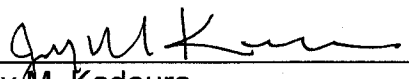
In the Supplemental Examiner's Answer mailed January 22, 2008, the Examiner for the first time rejected claims 13-14 under 35 U.S.C. § 101 for reciting a "computer readable medium," which the Examiner interpreted as covering a signal. (Supplemental Examiner's Answer, January 22, 2008, pp. 4-5.) Applicants herein amend claims 13-14 to recite a "computer readable storage medium." (Emphasis added.)

Applicants respectfully request that the Amendment be entered, pursuant to 37 C.F.R. § 41.33, on the basis that the "present rejected claims in better form for consideration on appeal." If the Examiner believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-8077.

Applicant believes no fee is due with this submission. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 283108005US from which the undersigned is authorized to draw.

Dated:

Respectfully submitted,

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